

2004 Water Quality Assessment (Final) - Category 5 Listings for WRIA 41

WRIA	Listing ID	Category	98 List?	Waterbody Name	Location Information					Parameter	Remarks	Medium
				Basis								
41	40945	5	N	COLUMBIA RIVER	NN57SG	657.65	16N	23E	20	Temperature		Water
				Grant County PUD station WANW (Wanapum Tailrace) shows 57 excursions beyond the criterion in 2000, 62 excursions in 2001, 30 excursions in 2002, and 86 excursions in 2003.	5						EPA has the lead in a temperature TMDL for the Columbia Snakes Rivers that is underway.	
41	9638	5	N	CRAB CREEK	FU07MU	22.31	19N	28E	11	pH		Water
				Carroll et al. (2000) station CC0 (CRAB CREEK AT MOUTH TO MOSES LAKE) shows 3 excursions beyond the criterion out of 9 samples collected between 03/01 - 09/01.							High pH	
41	9639	5	N	CRAB CREEK	FU07MU	25.808	20N	28E	35	pH		Water
				U.S. Bureau of Reclamation station CBP061 (PARKERHORN AT 7NE CO RD) shows 6 excursions beyond the criterion out of 21 samples collected between 1993-1999								
41	9639	5	N	CRAB CREEK	FU07MU	25.808	20N	28E	35	pH		Water
				Carroll et al. (2000) station CC1 (CRAB CREEK NEAR MOSES LAKE (USGS GAGE)) shows 3 excursions beyond the criterion out of 7 samples collected between 03/01 - 09/01.							High pH	
41	9640	5	N	CRAB CREEK	FU07MU	25.808	20N	28E	35	pH		Water
				Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41A110 (CRAB CREEK NEAR MOSES LAKE) shows 2 excursions beyond the criterion out of 17 samples collected between 1993 - 2001								
41	9640	5	N	CRAB CREEK	FU07MU	31.816	20N	28E	15	pH		Water
				Carroll et al. (2000) station CC2 (CRAB CREEK AT STRATFORD ROAD) shows 4 excursions beyond the criterion out of 6 samples collected between 03/01 - 09/01.							High pH	
41	9642	5	N	CRAB CREEK	FU07MU	45.045	21N	28E	18	pH		Water
				Carroll et al. (2000) station CC4 (CRAB CREEK AT ROAD 16) shows 3 excursions beyond the criterion out of 7 samples collected between 03/01 - 09/01.							High pH	
41	9644	5	Y	CRAB CREEK	FU07MU	22.31	19N	28E	11	Temperature		Water
				Carroll et al. (2000) station CC0 (CRAB CREEK AT MOUTH TO MOSES LAKE) shows 1 excursions beyond the criterion measured on these dates: 01/07/31, U.S. Bureau of Reclamation station CBP061 (PARKERHORN AT 7NE CO RD) shows 6 excursions beyond the criterion measured on these dates: 93/07/26, 95/05/23,								

WRIA	Listing ID	Category	98 List?	Waterbody Name	Location Information					Parameter	Remarks	Medium
				Basis								
41	8385	5	N	CRAB CREEK LATERAL U.S. Bureau of Reclamation station CBP030 (CRAB CR LAT AT CRAB CR WW) shows 5 excursions beyond the criterion out of 27 samples collected between 1993-1999. 1 excursion beyond the criterion at USGS station 12472380 (at Royal Lake near Othello) on 3/31/93.	QF71NO	0.754	16N	28E	18	pH		Water
41	16143	5	N	DE55 WASTEWAY U.S. Bureau of Reclamation station EID009 (DE 55 AND DE 49 BELOW CONFLUENCE) shows 3 excursions beyond the criterion out of 4 samples collected between 1993-1999	RX99AF	0.209	18N	30E	35	pH	High pH	Water
41	16144	5	N	EL 63.8 WASTEWAY U.S. Bureau of Reclamation station EID011 (EL 63.8 WASTEWAY BLW CONF EL63.8WW2) shows 3 excursions beyond the criterion out of 4 samples collected between 1993-1999	ON81WC	12.775	16N	29E	15	pH	High pH	Water
41	43265	5	N	FRENCHMAN HILLS LAKE USEPA National Lake Fish Tissue Study shows an excursion beyond the National Toxics Rule criterion in Largemouth Bass composite samples collected on 10/20/1999 at location (Frenchman Hills Lake).	695YQF		17N	26E	08	Dieldrin		Tissue
41	16148	5	N	FRENCHMAN HILLS WASTEWAY U.S. Bureau of Reclamation station CBP062 (FRENCHMAN HILLS WW AT GAGING STA) shows 4 excursions beyond the criterion out of 22 samples collected between 1993-1999; U.S.Geological Survey data from NWIS database station 12471090 (on SE C Road near Moses Lake) shows 3 excursions beyond the criterion out of 39 samples collected between 1991 and 1995.	AR96YO	13.496	17N	27E	09	pH	High pH	Water
41	8389	5	Y	FRENCHMAN HILLS WASTEWAY 9 excursions beyond the criterion at USGS station 12471090 (on SE C Road near Moses Lake) during 1992, 1993, and 1994. U.S. Bureau of Reclamation station CBP062 (FRENCHMAN HILLS WW AT GAGING STA) shows 7 excursions beyond the criterion measured on these dates: 93/06/02, 93/07/14,	AR96YO	13.496	17N	27E	09	Temperature		Water
41	42533	5	N	LIND COULEE Hallock (2004), Dept. of Ecology ambient station 41J070 shows 2 of 9 samples (22.2%) in year 2003 exceeded the percentile criterion.	WZ45YS	10.448	18N	29E	35	Fecal Coliform		Water

WRIA	Listing ID	Category	98 List?	Waterbody Name Basis	Location Information					Parameter	Remarks	Medium
41	6737	5	Y	LIND COULEE Hallock (2004), Dept. of Ecology ambient station 41J070 shows that 3 of 12 samples exceed the criterion. U.S.Geological Survey data from NWIS database station 12471400 (at SR 17 near Warden) shows 9 excursions beyond the criterion out of 178 samples collected between 1991 and 2001. U.S. Bureau of Reclamation station CBP011 (LIND COULEE AT RT 17XING) shows 4 excursions beyond the criterion out of 20 samples collected between 1993-1999.	WZ45YS	10.448	18N	29E	35	pH		Water
41	8392	5	Y	LIND COULEE 5 excursions beyond the criterion at USGS station 12471400 (at SR 17 near Warden) during 1992, 1993 and 1994. U.S. Bureau of Reclamation station CBP011 (LIND COULEE AT RT 17XING) shows 4 excursions beyond the criterion measured on these dates: 93/07/26, 96/07/09,	WZ45YS	10.448	18N	29E	35	Temperature		Water
41	8955	5	Y	LOWER CRAB CREEK Davis and Johnson, 1994. excursions beyond the criterion of edible fish tissue (Mountain Whitefish fillet) samples collected on 9/15/92 near Hwy 243.	WR93CG	0	15N	23E	03	4,4'-DDE	The sample medium was incorrectly listed as "water" in the 1998 303(d) list.	Tissue
41	8374	5	N	LOWER CRAB CREEK Hallock (2004), Dept. of Ecology ambient station 41A070 shows that 5 of 30 samples exceed the criterion. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41A070 (CRAB CREEK NEAR BEVERLY) shows 13 excursions beyond the criterion out of 49 samples collected between 1993 - 2001. 1 excursion beyond the criterion at USBR station CBP072 (at Crab Creek Road) on 5/20/92.	WR93CG	8.303	16N	24E	33	pH	Changed from Category 2 to Category 5 on 01/18/05 due to consolidation with Listing ID 11248. -kk	Water
41	16147	5	N	LOWER CRAB CREEK U.S. Bureau of Reclamation station CBP036 (LOWER CRAB CK ABV CONF RED ROCK COULEE) shows 4 excursions beyond the criterion out of 4 samples collected between 1993-1999	WR93CG	29.231	16N	26E	28	pH	High pH	Water
41	16154	5	N	LOWER CRAB CREEK U.S. Bureau of Reclamation station CBP072 (LOWER CRAB CR AT CRAB CR RD) shows 7 excursions beyond the criterion out of 20 samples collected between 1993-1999	WR93CG	0.764	15N	23E	03	pH	High pH	Water
41	16155	5	N	LOWER CRAB CREEK U.S. Bureau of Reclamation station CBP079 (LOWER CRAB CR AT MCMANNAN RD) shows 9 excursions beyond the criterion out of 21 samples collected between 1993-1999	WR93CG	57.426	16N	28E	09	pH	High pH	Water

WRIA	Listing ID	Category	98 List?	Waterbody Name	Location Information				Parameter	Remarks	Medium		
				Basis									
a	41	8378	5	Y	LOWER CRAB CREEK	WR93CG	0	15N	23E	03	Temperature	Water	
	4 excursions beyond the criterion at USGS station 12472600 (mouth near Beverly) during 1992, 1993, and 1994.												
	41	8379	5	N	LOWER CRAB CREEK	WR93CG	8.303	16N	24E	33	Temperature	Water	
	Dept. of Ecology unpublished data from core ambient monitoring station 41A070 (Crab Cr. near Beverly) shows a 7-day mean of daily maximum values of 28 for mid-week 13 August 2001.												
	Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41A070 (CRAB CREEK NEAR BEVERLY) shows 7 excursions beyond the criterion out of 49 samples collected between 1993 - 2001.												
Davis, 1993, 1 excursion beyond the criterion at 1st bridge on Crab Creek Road on 5/30/92.													
	41	8953	5	Y	LOWER CRAB CREEK	WR93CG	0	15N	23E	03	Total PCBs	Tissue	
Davis and Johnson, 1994. excursions beyond the criterion of edible fish tissue (Mountain Whitefish fillet) samples collected on 9/15/92 near Hwy 243.													
	41	42434	5	N	MOSES LAKE	995AYH	47119B3A2	47.105	119.325	2,3,7,8-TCDD	Tissue		
Seiders, 2004. shows the National Toxics Rule criterion was exceeded in Rainbow trout fillet samples collected 10/23/2002.													
	41	42171	5	N	MOSES LAKE	995AYH	47119B3A2	47.105	119.325	Total PCBs	Tissue		
Seiders, 2004. shows the National Toxics Rule criterion was exceeded in Largemouth bass and Rainbow trout fillet samples collected 10/23/2002.													
	41	42782	5	N	MOSES LAKE	995AYH	47119B3B1	47.115	119.315	Total Phosphorus	Water		
Department of Ecology TMDL Assessment, station ML4 (SOUTH END OF PARKER HORN) shows in 2001, 0 of 5 epilimnion samples collected (sampling dates: 5/30/01; 7/2/01; 8/1/01; 8/29/01; 9/26/01) exceeded the Phosphorus Action Value of 50ug/L established by Carroll, et. al., 2000.										Department of Ecology, Water Quality Policy 1-11, part 9 states that, for phosphorus, 3 excursions in a sample size of 4 requires the waterbody be listed in Category 5.			
Department of Ecology Lake Database, station 1 shows in 2000, 1 of 4 epilimnion samples collected by Department of Ecology (sampling dates: 6/28/00; 7/19/00; 8/30/00; 9/27/00) exceeded the Phosphorus Action Value established by Carroll, et. al., 2000. (Ecology Publication No. 00-03-036).													
Department of Ecology Lake Database, station 1 shows in 1998, 3 of 4 epilimnion samples collected by Department of Ecology (sampling dates: 6/17/98; 7/15/98; 8/12/98; 9/16/98) exceeded the Phosphorus Action Value of 50ug/L established by Carroll, et. al., 2000. (Ecology Publication No. 00-03-036).													
	41	11232	5	N	MOSES LAKE OUTLET	833WBK	47119A3I3	47.085	119.335	pH	Water		
Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41H050 (MOSES LAKE AT SOUTH OUTLET) shows 3 excursions beyond the criterion out of 3 samples collected between 1993 - 2001										High pH			

WRIA	Listing ID	Category	98 List?	Waterbody Name Basis	Location Information					Parameter	Remarks	Medium
41	16151	5	N	PE 16.4 M12 WASTEWAY U.S. Bureau of Reclamation station EID017 (PE 16.4M12 WASTEWAY AT FU 223 BLK 49) shows 4 excursions beyond the criterion out of 4 samples collected between 1993-1999	BJ83CP	0	15N	28E	07	pH	High pH	Water
41	8945	5	Y	POTHOLES RESERVOIR Serdar, et al. 1994. excursions beyond the criterion in edible fish tissue (Largemouth Bass) collected from station 358553 (300m off of mouth of Lind Coulee Spillway) on 6/8/92.	833WBK	46119J1J7	46.995	119.175		Dieldrin		Tissue
41	8946	5	Y	POTHOLES RESERVOIR Serdar, et al. 1994. excursions beyond the criterion in edible fish tissue (Lake Whitefish) collected from station 358551 (400m off of mouth of Frenchman Hills Wasteway) on 6/8/92.	833WBK	46119J3I4	46.985	119.345		Dieldrin		Tissue
41	16157	5	N	RBC WASTEWAY U.S. Bureau of Reclamation station CBP109 (RBC WASTEWAY AT LOWER CRAB CK RD S35 T16N R23E) shows 12 excursions beyond the criterion out of 27 samples collected between 1993-1999	PE38ZZ	0	16N	23E	35	pH	High pH	Water
41	16145	5	N	RCD WASTEWAY U.S. Bureau of Reclamation station CBP008 (RCD WW AT OSULLIVAN RD XING) shows 4 excursions beyond the criterion out of 21 samples collected between 1993-1999	LK87EA	2.105	18N	29E	31	pH	High pH	Water
41	17230	5	N	REDROCK LAKE Davis et al. 1998. show the National Toxic Rule criterion was exceeded a composite of 5 fillets of Micropterus salmoides collected on 9/13/1995 at station REDRLRC (REDROCK LAKE SOUTHEAST OF ROYAL CITY).	313FEZ	16N	26E	17		4,4'-DDE		Tissue
41	17231	5	N	REDROCK LAKE Davis et al. 1998. show the National Toxic Rule criterion was exceeded a composite of 5 fillets of Micropterus salmoides collected on 9/13/1995 at station REDRLRC (REDROCK LAKE SOUTHEAST OF ROYAL CITY).	313FEZ	16N	26E	17		Dieldrin		Tissue
41	11245	5	N	ROCKY COULEE WASTEWAY Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41G070 (ROCKY COULEE WASTEWAY @ K NE) shows 3 excursions beyond the criterion out of 6 samples collected between 1993 - 2001 U.S. Bureau of Reclamation station EID003 (ROCKY COULEE WASTEWAY AT BROADWAY EXTENDED) shows 4 excursions beyond the criterion out of 4 samples collected between 1993-1999	SF91XC	0.948	19N	28E	01	pH	High pH	Water
41	16150	5	N	ROCKY COULEE WASTEWAY U.S. Bureau of Reclamation station EID005 (ROCKY COULEE DRAIN AT HWY 17) shows 4 excursions beyond the criterion out of 4 samples collected between 1993-1999	LK87EA	13.072	19N	28E	36	pH	High pH	Water

WRIA	Listing ID	Category	98 List?	Waterbody Name Basis	Location Information					Parameter	Remarks	Medium
41	8395	5	Y	ROCKY FORD CREEK Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41D070 (ROCKY FORD CREEK AT HWY 17) shows 2 excursions beyond the criterion out of 6 samples collected between 1993 - 2001 measured on these dates: 00/11/12, 00/12/10, Carroll et al. (2000) station RF1A (ROCKY FORD CREEK @ HWY17) shows 1 excursions beyond the criterion measured on this date: 01/09/24. 2 excursions at USGS station 12470600 (at SR 17 near Ephrata) on 11/18/91 and 3/2/92. U.S. Bureau of Reclamation station CBP060 (ROCKY FORD CR AT RT 17) shows 5 excursions beyond the criterion measured on these dates: 93/01/25, 93/06/02, 98/02/23, 98/07/01, 98/10/28. Cusimano (1998) station ROC6 (ROCKY FORD CR AT OLD HWY 17 BRIDGE) shows 2 excursions beyond the criterion measured on these dates: 97/08/20, 97/11/04.	RC52FG	23.836	20N	27E	05	Dissolved oxygen		Water
41	15077	5	N	ROCKY FORD CREEK Carroll et al. (2000) station RF2 (ROCKY FORD CREEK AT OLD USGS GAGE) shows 5 excursions beyond the criterion measured on these dates: 01/05/29, 01/06/26, 01/07/31, 01/08/28, 01/09/24, Carroll et al. (2000) station RF2A (ROCKY FORD CREEK BELOW TROUTLODGE) shows 1 excursions beyond the criterion measured on these dates: 01/09/24, Cusimano (1998) station FSH2 (ROCKY FORD CR B/L TRTLG I FISH HTCHRY) shows 2 excursions beyond the criterion measured on these dates: 97/08/20, 97/11/04, Cusimano (1998) station ROC3 (ROCKY FORD CR A/B TRTLG II FISH HTCHRY) shows 2 excursions beyond the criterion measured on these dates: 97/08/20, 97/11/04,	RC52FG	33.182	21N	27E	16	Dissolved oxygen	According to Carroll (ECY/EAP 2003), a review of monitoring studies for dissolved oxygen exceedances indicate that this water is impaired.	Water
41	15092	5	N	ROCKY FORD CREEK Cusimano (1998) station ROC8 (ROCKY FORD CR AT BARRIER DAM) shows 1 excursions beyond the criterion out of 2 samples collected between 08/97 - 06/99. Cusimano (1998) station ROC7 (ROCKY FORD CR A/B DETENTION POND) shows 1 excursions beyond the criterion out of 2 samples collected between 08/97 - 06/99. Carroll et al. (2000) station RF0 (ROCKY FORD CREEK BELOW ABATEMENT DAM) shows 3 excursions beyond the criterion out of 10 samples collected between 03/01 - 09/01. Carroll et al. (2000) station RF1 (ROCKY FORD CREEK ABOVE ABATEMENT POND) shows 0 excursions beyond the criterion out of 5 samples collected between 03/01 - 09/01.	RC52FG	21.961	20N	27E	08	pH	High pH	Water

WRIA	Listing ID	Category	98 List?	Waterbody Name	Location Information					Parameter	Remarks	Medium
				Basis								
41	8397	5	Y	ROCKY FORD CREEK Hallock (2001) Dept. of Ecology Ambient Monitoring Station 41D070 (ROCKY FORD CREEK AT HWY 17) shows 2 excursions beyond the criterion out of 6 samples collected between 1993-2001 measured on these dates: 01/05/13, 01/06/10. Carroll et al. (2000) station RF1A (ROCKY FORD CREEK @ HWY17) shows 1 excursions beyond the criterion measured on this date: 01/09/24. Cusimano (1998) station ROC6 (ROCKY FORD CR AT OLD HWY 17 BRIDGE) shows 1 excursions beyond the criterion measured on this date: 97/08/20. 2 excursions beyond the criterion at USGS 12470600 (at SR 17 near Ephrata) on 7/13/92 and 6/29/94. U.S. Bureau of Reclamation station CBP060 (ROCKY FORD CR AT RT 17) shows 8 excursions beyond the criterion measured on these dates: 93/06/02, 93/07/19.	RC52FG	23.836	20N	27E	05	Temperature		Water
41	17217	5	N	ROYAL LAKE Davis et al. 1998. show the National Toxic Rule criterion was exceeded a composite of 5 fillets of Micropterus dolomieu collected on 9/13/1995 at station ROYALLO (ROYAL LAKE NORTHWEST OF OTHELLO).	000BAA	00U	XXU	00		4,4'-DDE		Tissue
41	17218	5	N	ROYAL LAKE Davis et al. 1998. show the National Toxic Rule criterion was exceeded a composite of 5 fillets of Micropterus dolomieu collected on 9/13/1995 at station ROYALLO (ROYAL LAKE NORTHWEST OF OTHELLO).	000BAA	00U	XXU	00		Dieldrin		Tissue
41	6738	5	N	SAND HOLLOW CREEK U.S.Geological Survey data from NWIS database station 12464606 (near Vantage) shows 8 excursions beyond the criterion out of 43 samples collected between1992 and 1997.	DI77OE	2.472	17N	23E	27	pH	High pH	Water
41	8398	5	Y	SAND HOLLOW CREEK 7 excursions beyond the criterion at USGS station 12464606 (near Vantage) between 1992, 1993 and 1994.	DI77OE	2.472	17N	23E	27	Temperature		Water
41	16156	5	N	UNNAMED CREEK U.S. Bureau of Reclamation station CBP080 (DCC1 AT RED ROCK COULEE RD) shows 11 excursions beyond the criterion out of 20 samples collected between 1993-1999.	MB83BM	0	16N	26E	17	pH	High pH	Water
41	16153	5	N	W35.9B WASTEWAY U.S. Bureau of Reclamation station CBP086 (W35.9B WW AT END) shows 6 excursions beyond the criterion out of 22 samples collected between 1993-1999	DA61BM	65.126	19N	23E	11	pH	High pH	Water